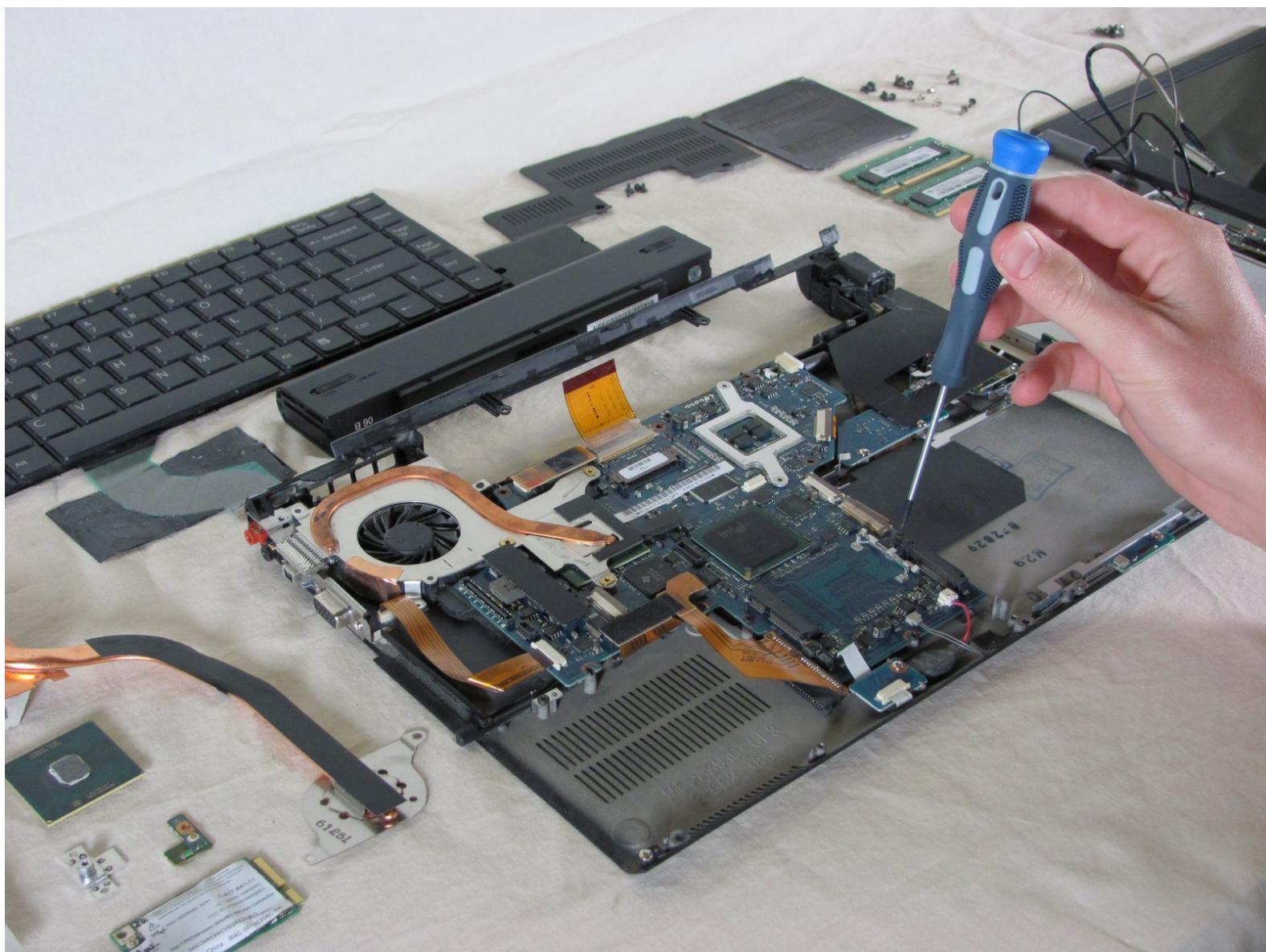




# Sony Vaio PCG-6J2L Logic Board Replacement

Written By: David Hoyt



# INTRODUCTION

Use this guide to guide you in replacing your laptop's logic board (motherboard).

## Hazards

Keep out of reach of children and pets.

DO NOT attempt teardown or repair your device under the influence of drugs or alcohol.

DO NOT ingest any parts of the system.

Use the correct tools as stated in the tools section.

DO NOT touch any gold connectors on interior or exterior of the system.

Make sure system is unplugged and turned off before performing any maintenance on the system.

## TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [TR10 Torx Security Screwdriver](#) (1)

## Step 1 — Battery



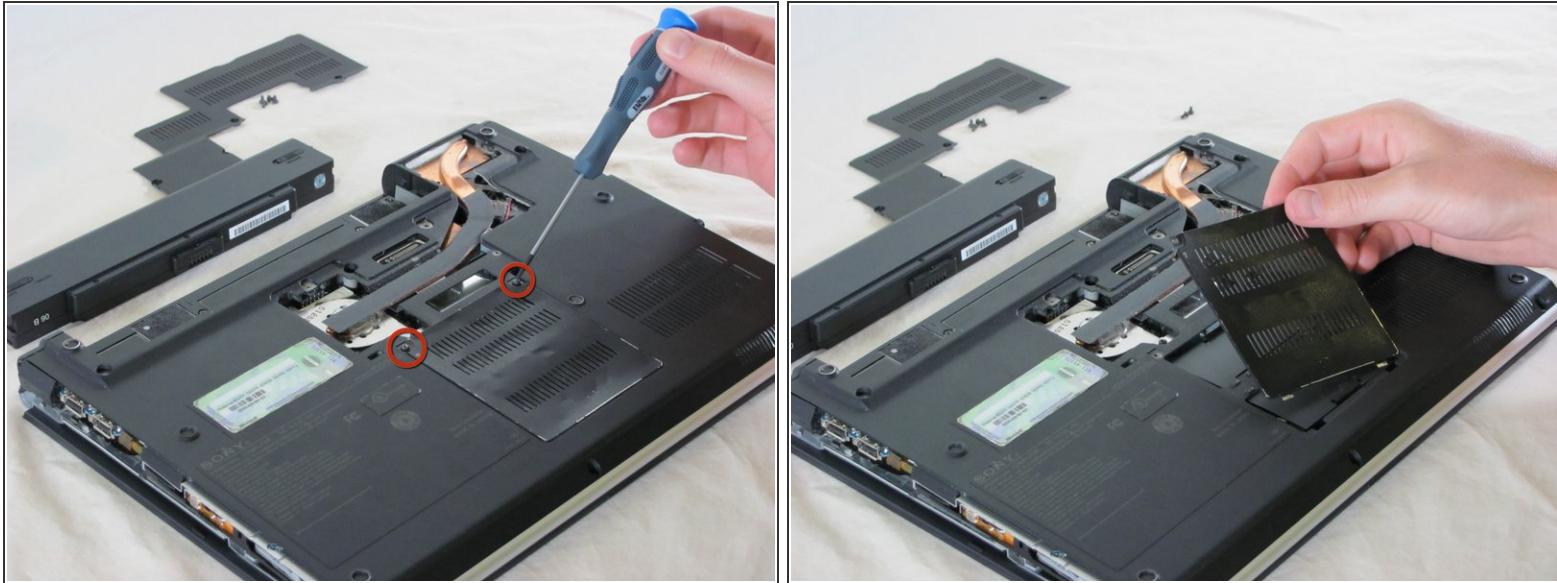
- Set the computer display-side down.
- Unlock the battery by sliding the port-side latch to the 'unlock' position.

## Step 2



- On the opposite side of the battery, press the release latch and slide the battery away from the main body to remove.

## Step 3 — Memory



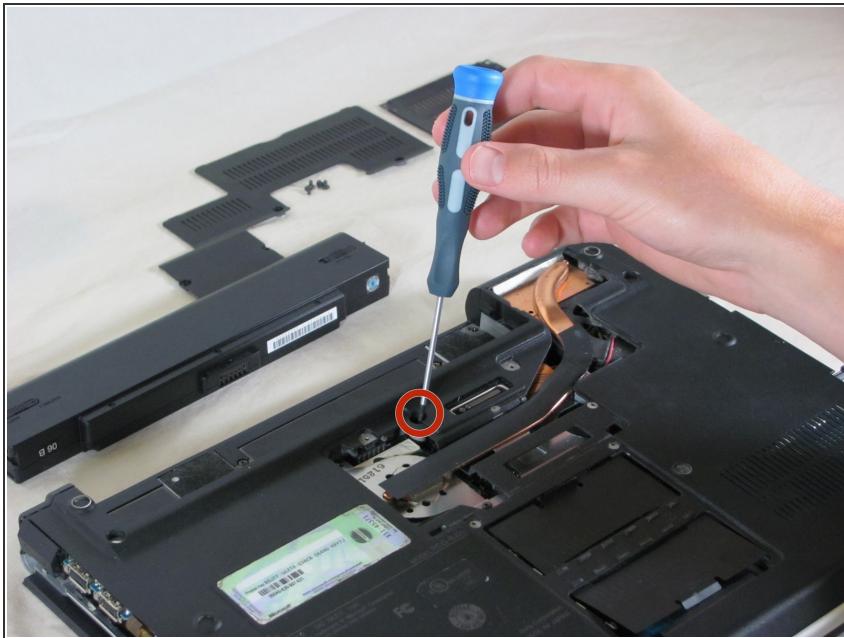
- Unscrew the two memory panel screws and set the panel aside.
- *(i)* Ignore the removal of the heatsink panel. This does not need to be removed for RAM module access.

## Step 4



- Lift the film covering to reveal the memory module with the tweezers.
- Pull the tabs on both sides of the RAM away from the module. The module will pop up.
- Repeat this step for the other RAM module located directly above the memory module just removed.

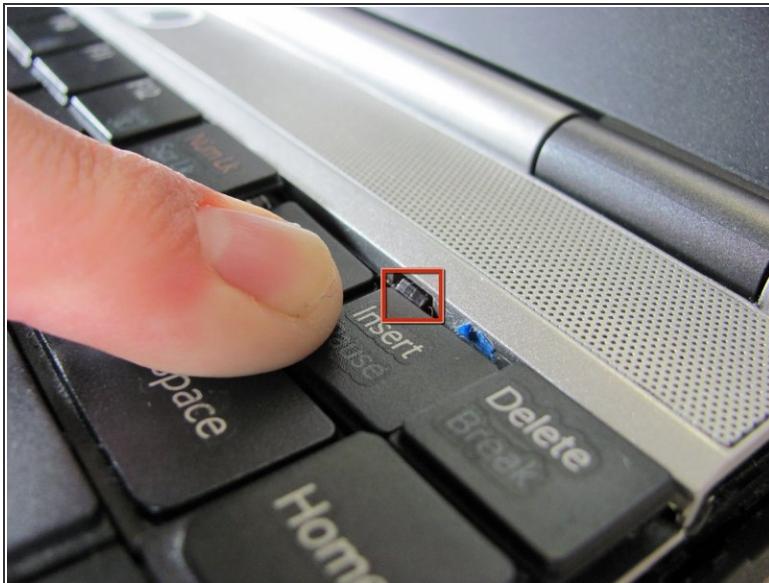
## Step 5 — Keyboard



*i* Ignore the removal of the heat sink and memory panels as depicted. They do not need to be removed for the completion of this guide.

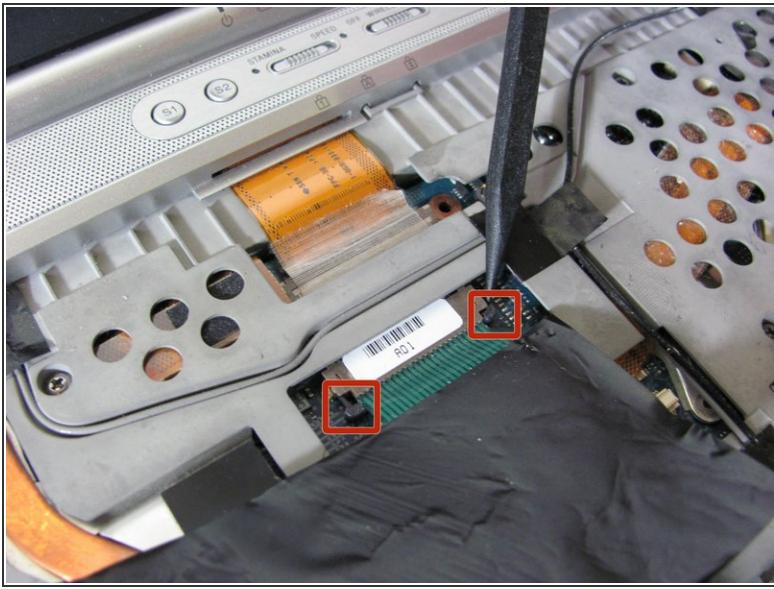
- Remove the Torx security screw near the center of the battery-side edge.

## Step 6



- Press the tabs on each side of the display-side of the keyboard with the flat edge of a spudger.
- Pull the keyboard toward the mouse pad and gently lift up.

## Step 7



**⚠** The keyboard is still attached by ribbon cable, don't try to remove the keyboard entirely yet.

- Disconnect the ribbon cable by pressing the tabs on either side of the connector. Pull the cable out parallel to the connector.
- Remove the keyboard.

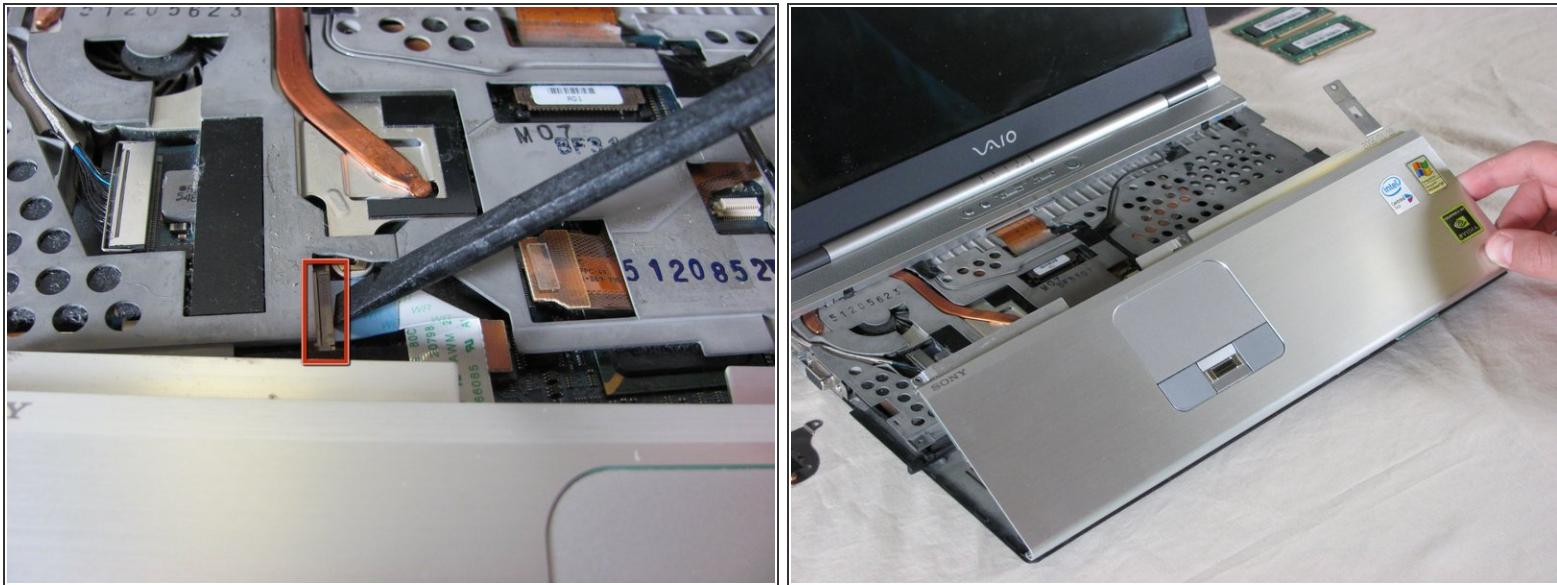
## Step 8 — Mouse Assembly



- Turn the laptop upside down.
- Remove the three screws from the front mouse panel located on the bottom of the laptop.

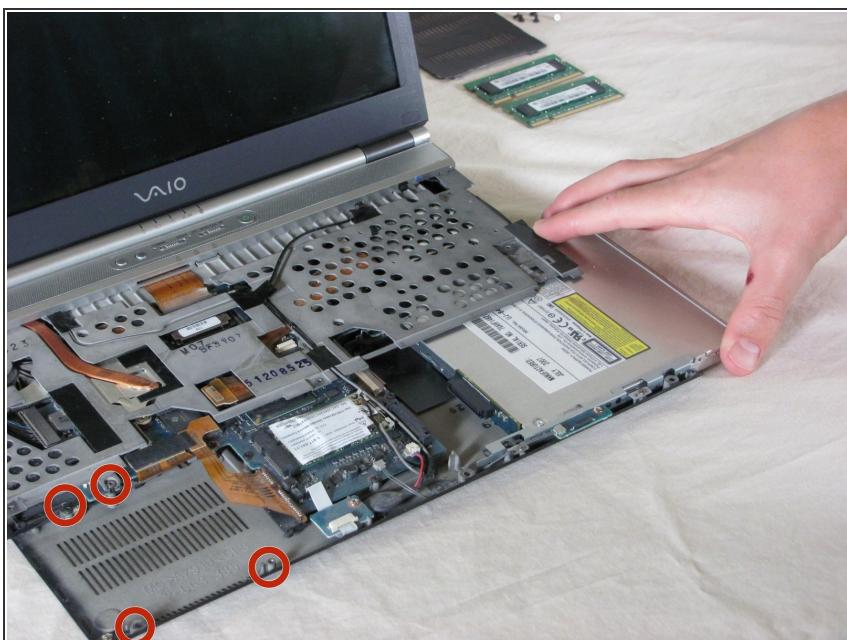
**i** Carefully flip the laptop back over. Remove three more screws from the top securing the panel. A ribbon cable will still be attached to the panel when you remove it.

## Step 9



- Lift the mouse assembly just enough to access the connecting ribbon cable.
- Lift the ribbon cable lock to remove the cable.
- Carefully remove the mouse panel assembly and set aside.

## Step 10 — Hard Drive



*(i)* This is where your hard drive would be located. The replacement must be a Serial ATA(SATA) hard drive

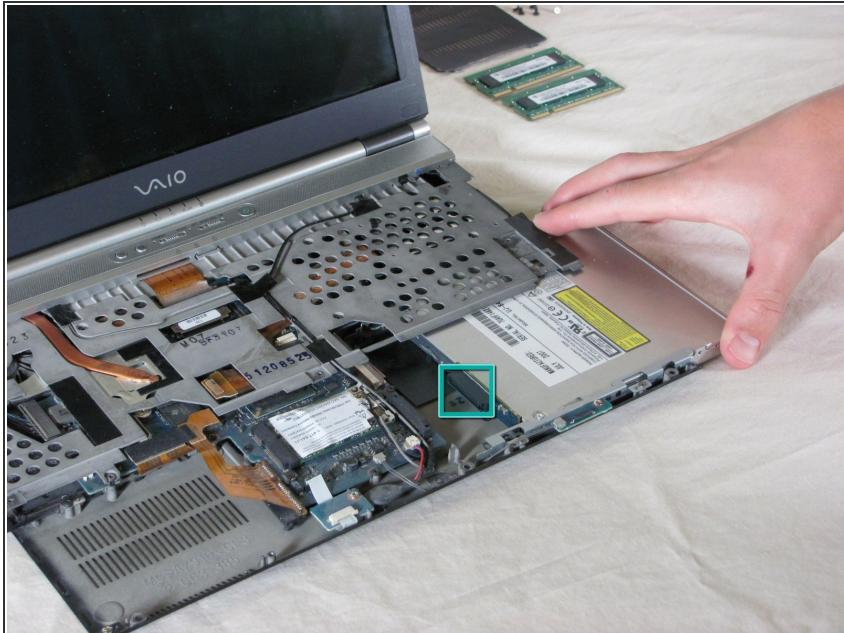
- Remove the four hard drive securing screws.

## Step 11 — Optical Drive



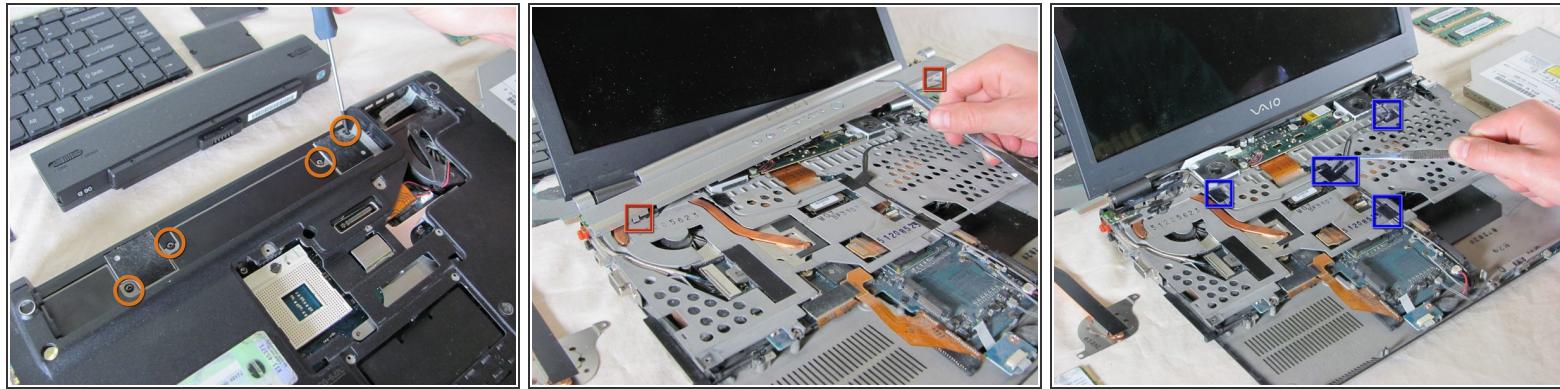
- Remove the securing screw on the bottom left of the optical drive.

## Step 12



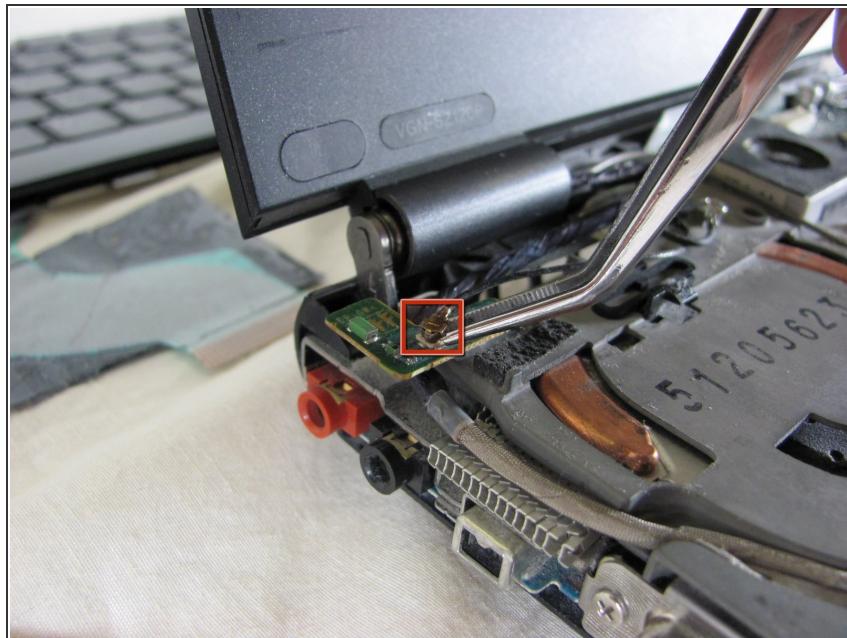
- Carefully slide the optical drive out right.
- The IDE connector on the left will pop out.

## Step 13 — Speaker Assembly



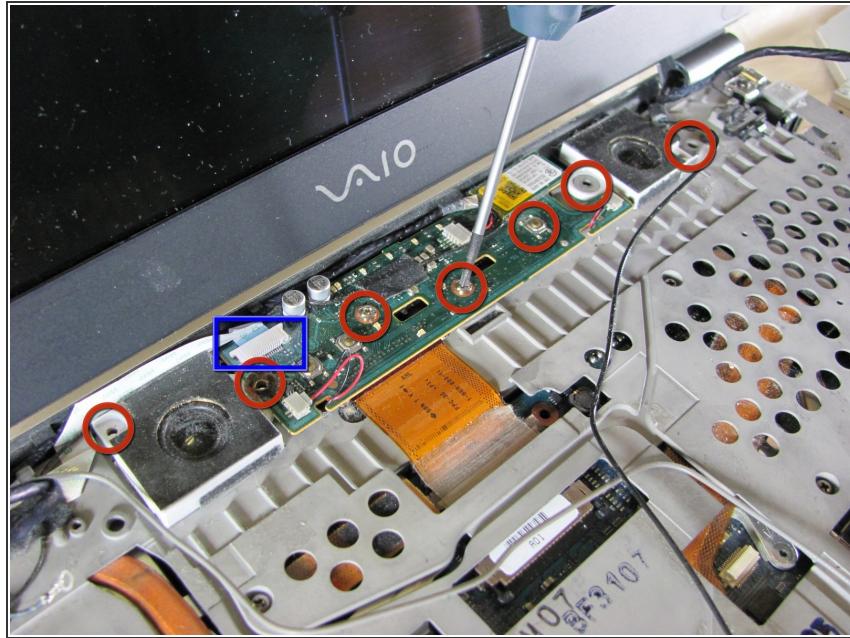
- Remove the four screws from the underside of the computer. These screws are located underneath where the battery sits and secure the top keyboard panel.
- To remove the panel below the screen, press up on the two tabs holding the panel in and lift up. The panel should pop off.
- Before proceeding, remove all black tape holding down wires and other cabling.

## Step 14



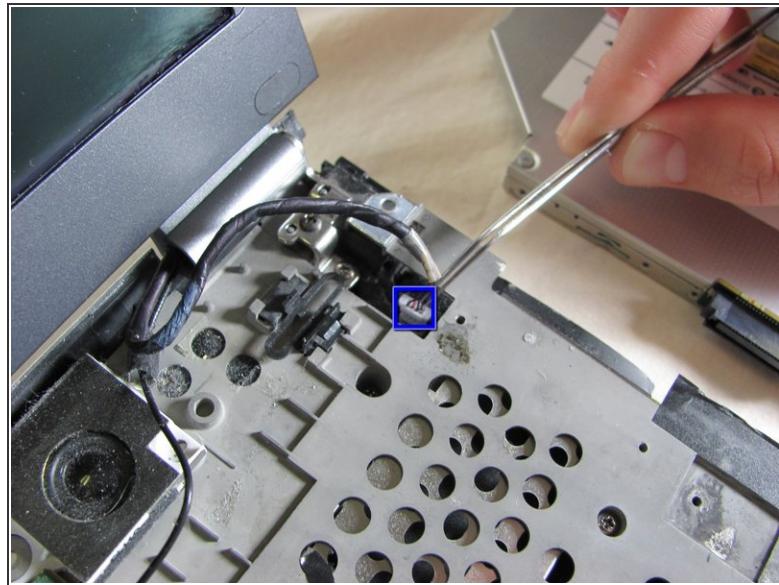
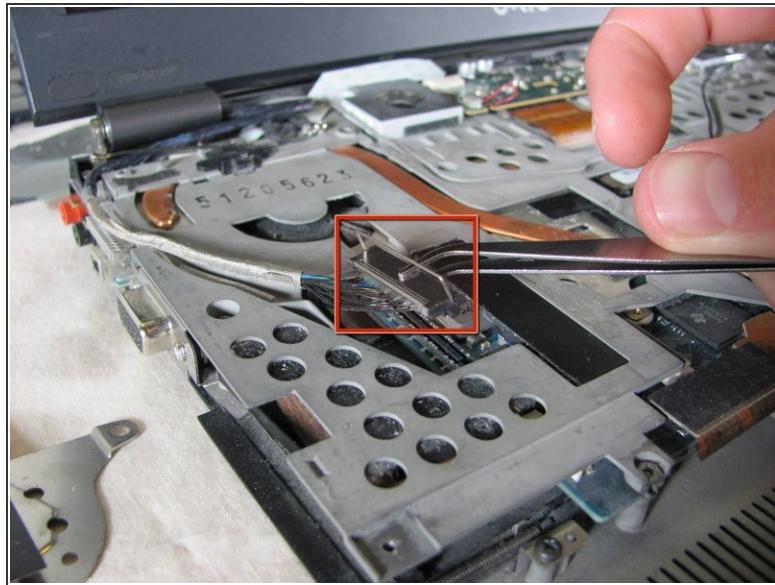
- Pop off the antenna using a pair of tweezers.

## Step 15



- Remove the seven philips screws holding the speaker assembly in place.
- Before removing the assembly, disconnect the ribbon cable located at the top left corner of the assembly.
- *(i)* The speaker assembly will come off with the display assembly.

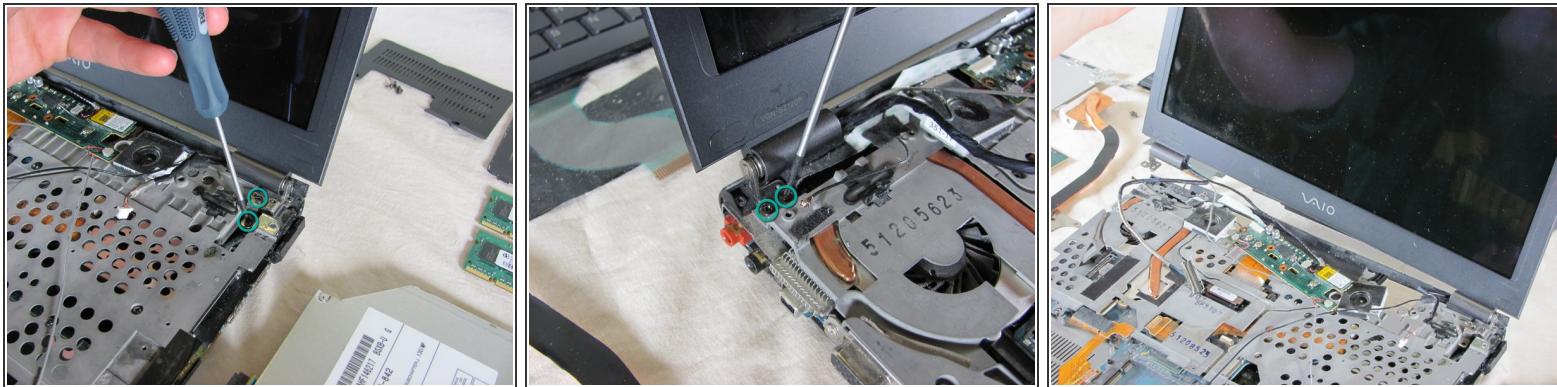
## Step 16 — screen



⚠ Caution: Be careful of snags when pulling up assembly and speakers.

- To remove the VGA cable, lift up on the metal bracket and gently lift the connector off the logic board.
- To remove the webcam cable, lift up the connector from the logic board gently.

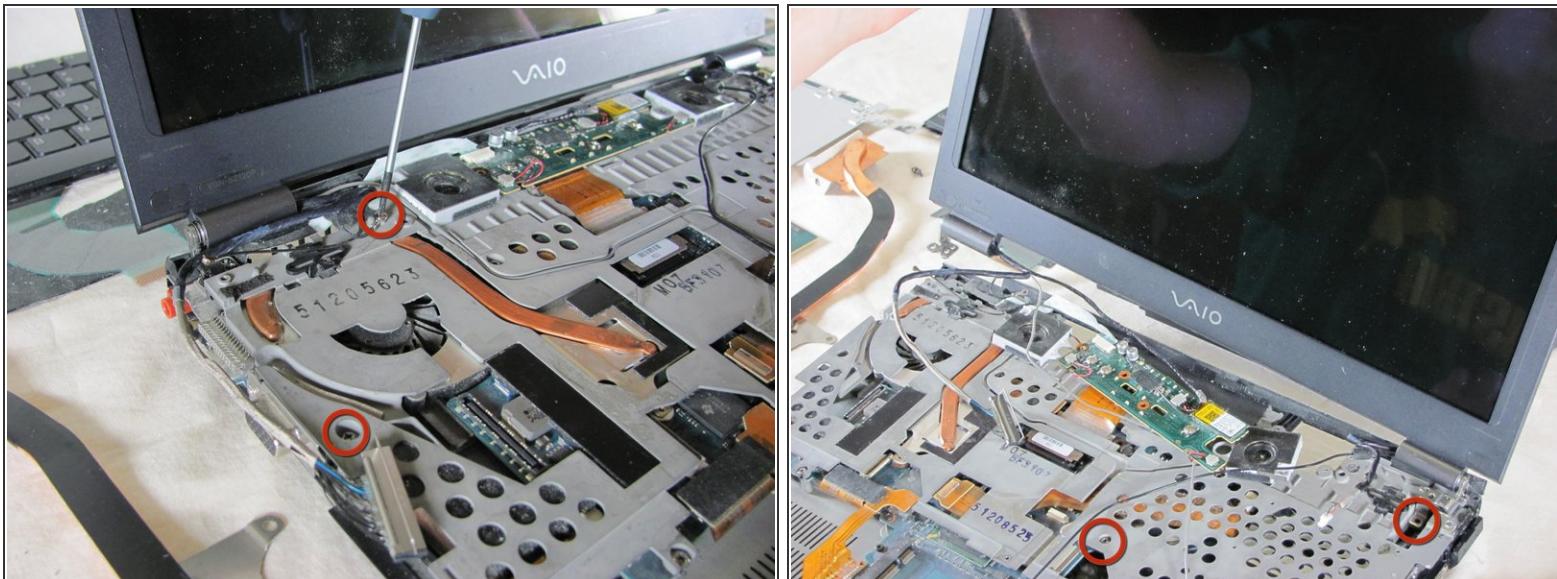
## Step 17



- Unscrew the four securing screws, two on each side of the LCD.
- Carefully remove the LCD. The speaker, bluetooth, and webcam assembly will come up with the display assembly.

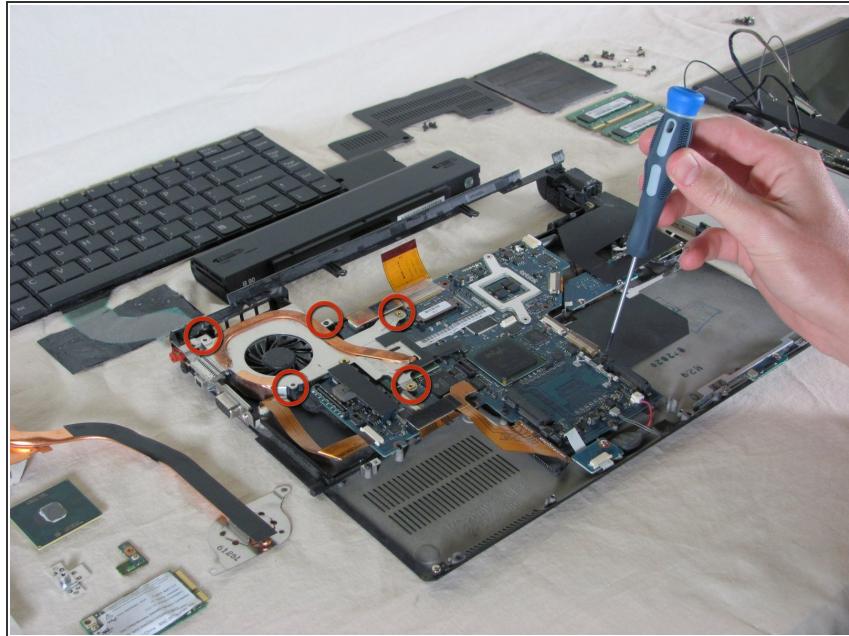
 Caution: Be careful of snags when pulling up display and speaker assemblies.

## Step 18 — Internal Fan



- Remove screws from keyboard tray
- Remove keyboard tray

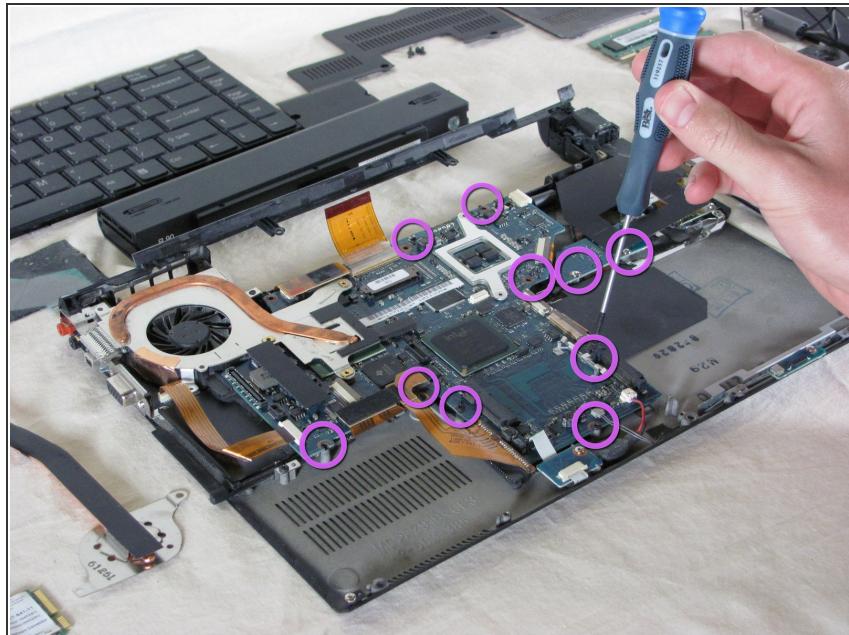
## Step 19



⚠ Caution: When removing the fan, be careful to not tear the attached ribbon cable.

- Unscrew all five screws from the internal fan.
- Gently remove the internal fan.

## Step 20 — Logic Board



⚠ Caution: Ground yourself before removing the logic board. Static electricity can damage the logic board.

- Unscrew and remove the logic board from the backing.

To reassemble your device, follow these instructions in reverse order.